

Work Order ID 79532

79532

Page 1

January-27-12 10:00:55 AM

Item ID: D4491-1

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Hinge, Left Upper

Start Date: 27/01/2012 Start Qty: 3.00

3

Cust Item ID:

Required Date: 03/02/2012 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan: M.C.J.

Date: 12/01/27 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4491	A								
100		0.00							
100									
Bandsaw	Memo	0.00		12-01-22				3	
Jeaspa Bandsaw	CUT BLANK 5.7" LONG								
110		0.00							
110									
Purchasing	Memo	0.00							
Purchasing	ISSUE P/O: 15016 TO ARCHUR PRESISION(GLOBUS) C OF C IS REQUIRED								
115									
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									

Receive & Inspect

DAS
16
9-88

12/02/13

CL 12/01/27 3

1143/28(4)

(43)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79532

79532

Page 2

January-27-12 10:00:55 AM

Item ID: D4491-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hinge, Left Upper
Start Date: 27/01/2012 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 03/02/2012 Req'd Qty: 3.00 ***3*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Identify as per dwg & Stock Location: <u>111</u>	0.00				3	<u>2</u>	12/9/10	
200									
Packaging	Memo	0.00							
Packaging									
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.00							
Quality Control									

12/9/12 df
12-09-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January-27-12 10:01:00 AM

Page 1

Work Order ID: 79532

79532

Parent Item: D4491-1

D4491-1

Parent Item Name: Hinge, Left Upper

Start Date: 27/01/2012

Required Date: 03/02/2012

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A NEW ISSUE 11-12-05 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4491-1P *D4491-1P* Hinge, Left Upper		Purchased	No				Each	1.0000		3			
										**	<i>(11/4/3/27 (4))</i>		

Location	Loc Qty	Loc Code
----------	---------	----------

ST	1	
----	---	--

77427	1	
-------	---	--

M304B3.500X03.500	Purchased	No				f	8.0000			1.44			
-------------------	-----------	----	--	--	--	---	--------	--	--	------	--	--	--

M304B3 500X03 500

304 BAR 3.500" X 3.500"

**

Location	Loc Qty	Loc Code
----------	---------	----------

MAT009	8	
--------	---	--

120006	8	
--------	---	--

1.50 *12-01-22*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 19532
Description: Hinge, left upper		Part Number: 04491-1
Inspection Dwg: 04491	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

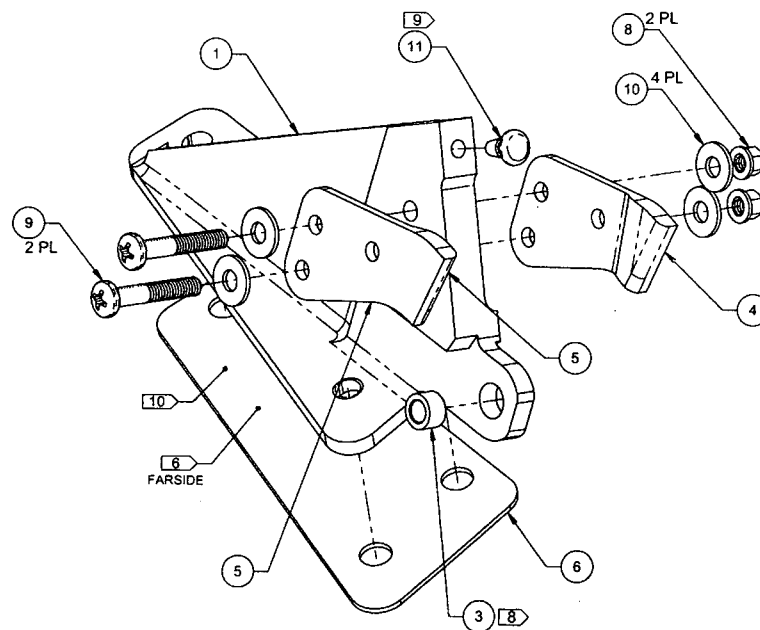
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.33 Ref	± 0.030	4.34	✓		✓	
3.385	± 0.010	3.386	✓		✓	
3.145	± 0.010	3.148	✓		✓	
0.345	± 0.010	0.351	✓		✓	
0.400	± 0.010	0.401	✓		✓	
13° Ref	± 1/2	13°	✓		S	
0.990	± 0.010	0.992	✓		✓	
R0.25	±	R0.25	✓		S	
0.080	± 0.010					
0.270	± 0.010	0.270	✓		✓	
0.235	± 0.010	0.236	✓		✓	
0.51	± 0.030	0.50	✓		✓	
2.55 Ref	± 0.030	2.56			✓	
1.880	± 0.010	1.886	✓		✓	
0.150	± 0.010	0.155	✓		✓	
R0.125	±	R0.125	✓		✓	
1.170	± 1/2					
0.177	± 0.005 0.001	0.180	✓		✓	
1.305	± 0.010	1.308	✓		✓	
0.450	± 0.010	0.452	✓		✓	
1.185	± 0.010	1.188	✓		✓	
0.700	± 0.010	0.702	✓		✓	
0.333/314	± 0.005 - 0.001	0.314	✓		✓	

Measured by: Smb	Audited by: DAS	Preliminary Approval:
Date: 12-8-13	Date: 16 JAN 2014	Date:

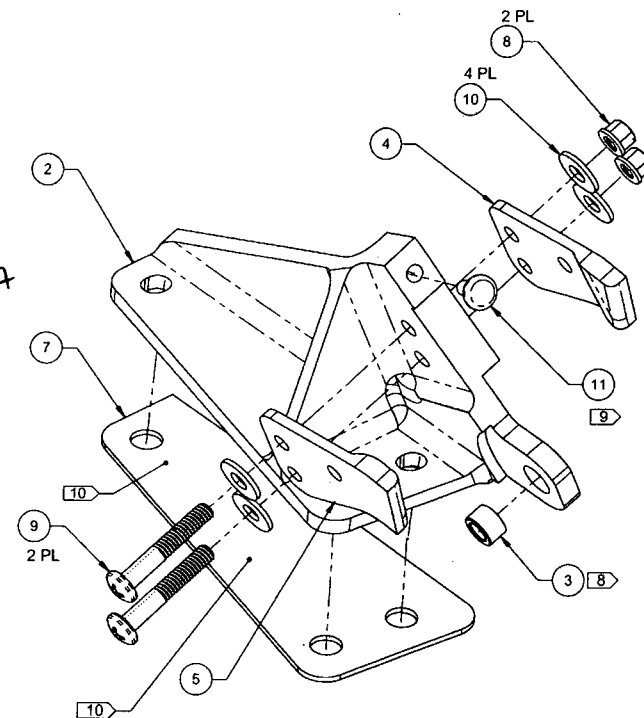
Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X	X	D4491-041	DOOR HINGE ASSY, LEFT-UPPER
			D4491-043	DOOR HINGE ASSY, LEFT-LOWER
1	1		D4491-1	HINGE, LEFT-UPPER
2		1	D4491-3	HINGE, LEFT-LOWER
3	1	1	D4492-1	BUSHING
4	1	1	D4493-1	HINGE FORK
5	1	1	D4493-2	HINGE FORK
6	1		D4520-1	HINGE SHIM
7		1	D4520-3	HINGE SHIM
8	2	2	MS21043-08	NUT, SELF LOCKING, #8
9	2	2	MS27039C0816	SCREW, PN-HD, #8
10	4	4	NAS1149CN832R	WASHER, FL, #8
11	1	1	POF-40022	PUSH-ON FEET

SHIP COPY
 RELEASED
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO A REVISION
 WITH A NEW
 WORK ORDER
 39532 M.L.J
 12/01/27



D4491-041 HINGE, LEFT-UPPER



D4491-043 HINGE, LEFT-LOWER

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI044 6.1
- 7) WEIGHT: 0.3 lbs
- 8) PRESS-FIT BUSHING INTO ITEM 1/2
- 9) SECURE USING 1357 CONTACT CEMENT (3M)
- 10) COAT MATING SURFACES WITH PROSEAL

RELEASE
 2012-01-26
 M

A	NEW RELEASE	RP	12.01.23
REV.	DESCRIPTION	BY	DATE
DESIGN	RP		
DRAWN	RP		
CHECKED	AS		
MFG. APPR.	AS		
APPROVED	AS		
DE APPR.	AS		
DATE	12.01.23		

DART AEROSPACE LTD
 HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4491
 REV. A
 SHEET 1 OF 6

TITLE: DOOR HINGE SETS
 SCALE: NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

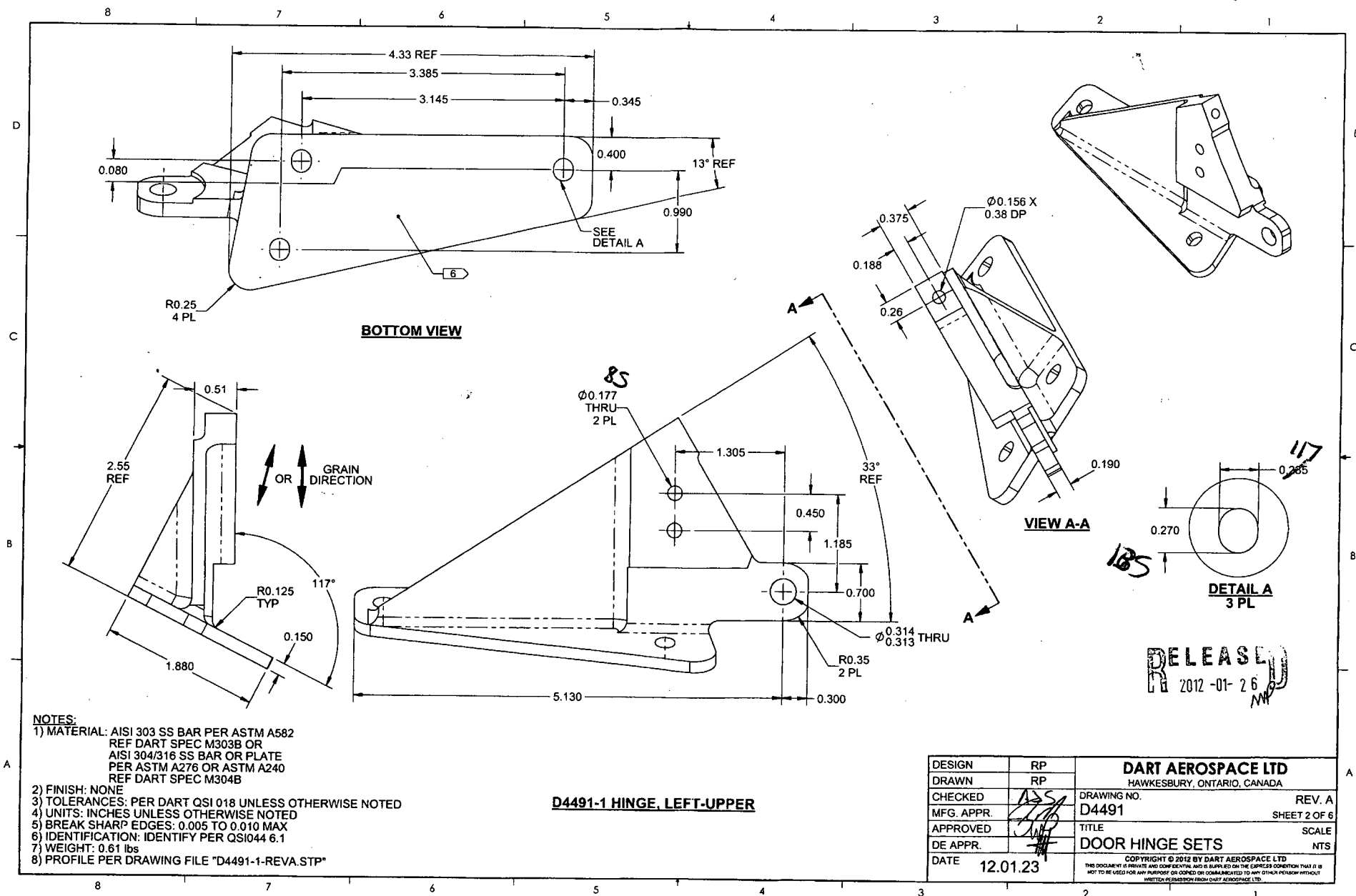
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79532



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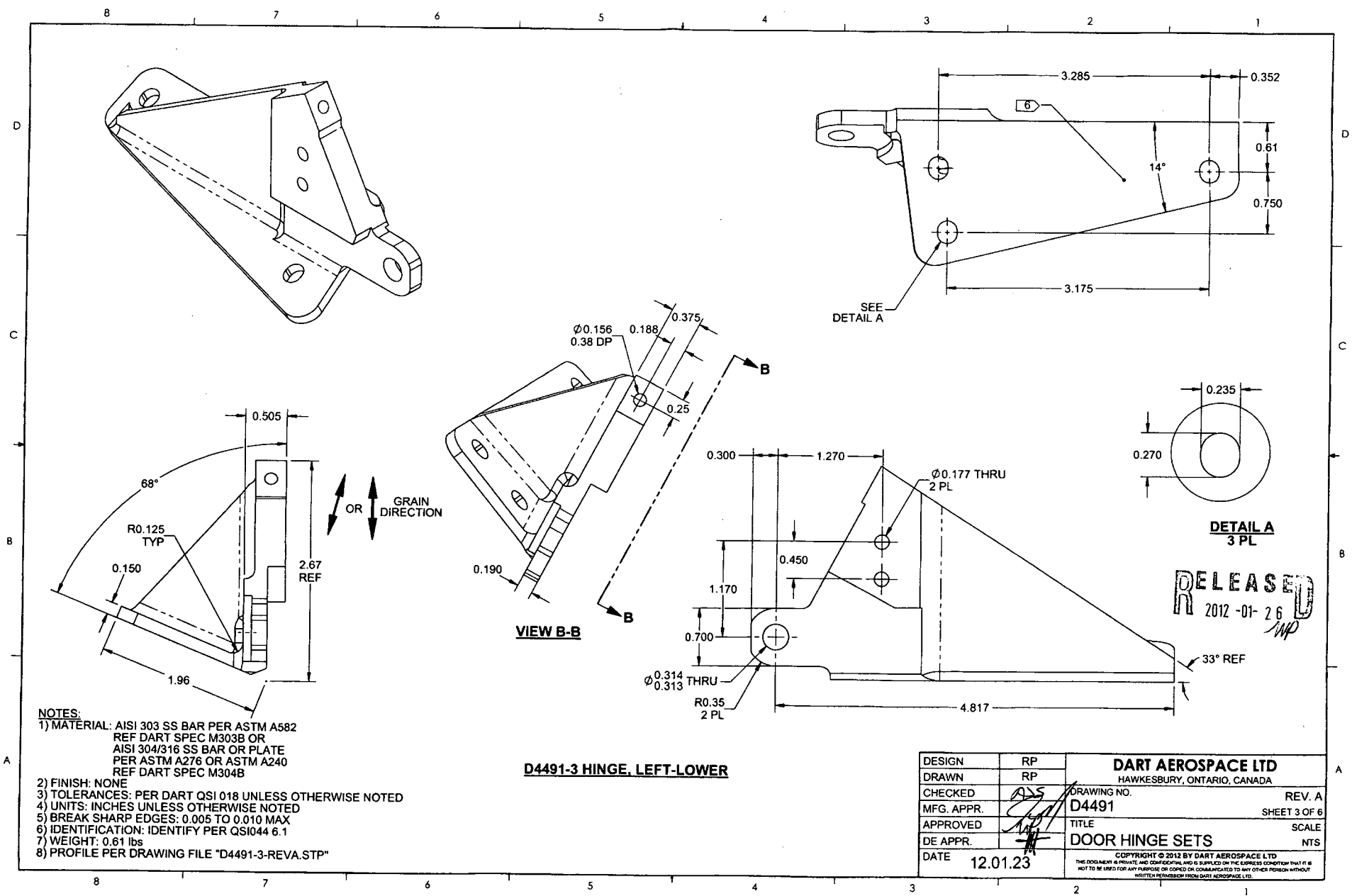
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NOTE: Date & initial all entries

79532



DESIGN	RP	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>MP</i>	D4491	SHEET 3 OF 6
APPROVED	<i>MP</i>	TITLE	SCALE
DE APPR.	<i>MP</i>	DOOR HINGE SETS	NTS
DATE	12.01.23	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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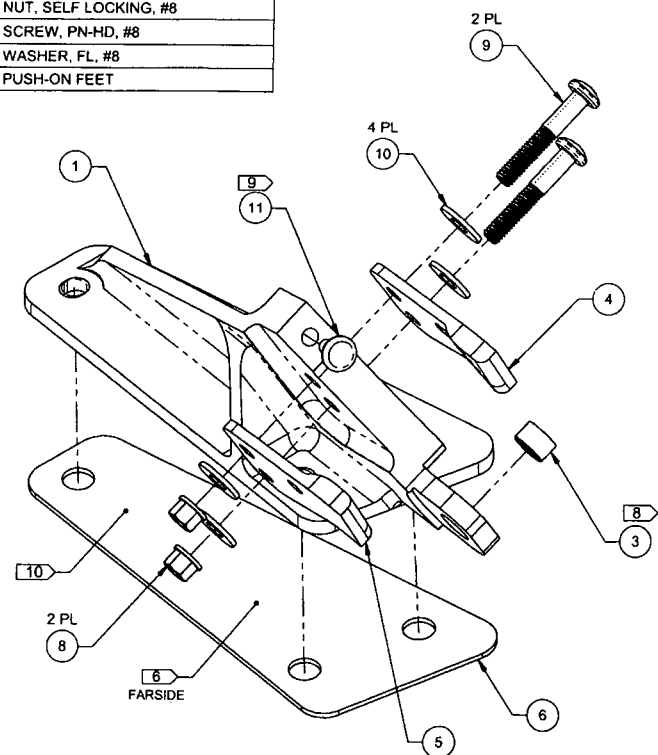
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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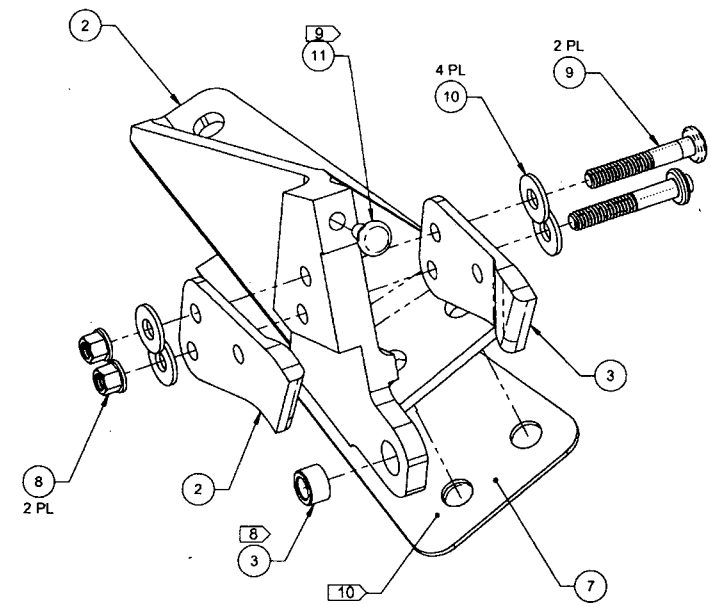
NOTE: Date & initial all entries

79532

ITEM	QTY -042	QTY -044	P/N	DESCRIPTION
	X		D4491-042	DOOR HINGE ASSY, RIGHT-UPPER
		X	D4491-044	DOOR HINGE ASSY, RIGHT-LOWER
1	1		D4491-2	HINGE, RIGHT-UPPER
2		1	D4491-4	HINGE, RIGHT-LOWER
3	1	1	D4492-1	BUSHING
4	1	1	D4493-1	HINGE FORK
5	1	1	D4493-2	HINGE FORK
6	1		D4520-1	HINGE SHIM
7		1	D4520-3	HINGE SHIM
8	2	2	MS21043-08	NUT, SELF LOCKING, #8
9	2	2	MS27039C0816	SCREW, PN-HD, #8
10	4	4	NAS1149CN832R	WASHER, FL, #8
11	1	1	POF-40022	PUSH-ON FEET



D4491-042 HINGE, RIGHT-UPPER



D4491-044 HINGE, RIGHT-LOWER

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI044 6.1
- 7) WEIGHT: 0.3 lbs
- 8) PRESS-FIT BUSHING INTO ITEM 1/2
- 9) SECURE USING 1357 CONTACT CEMENT (3M)
- 10) COAT MATING SURFACES WITH PROSEAL

RELEASED
R 2012 -01- 2 6

DESIGN	RP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	RP	
CHECKED	<i>ASS</i>	DRAWING NO. D4491
MFG. APPR.	<i>SSP</i>	REV. A SHEET 4 OF 6
APPROVED	<i>SSP</i>	TITLE DOOR HINGE SETS
DE APPR.	<i>SSP</i>	SCALE NTS
DATE	12.01.23	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

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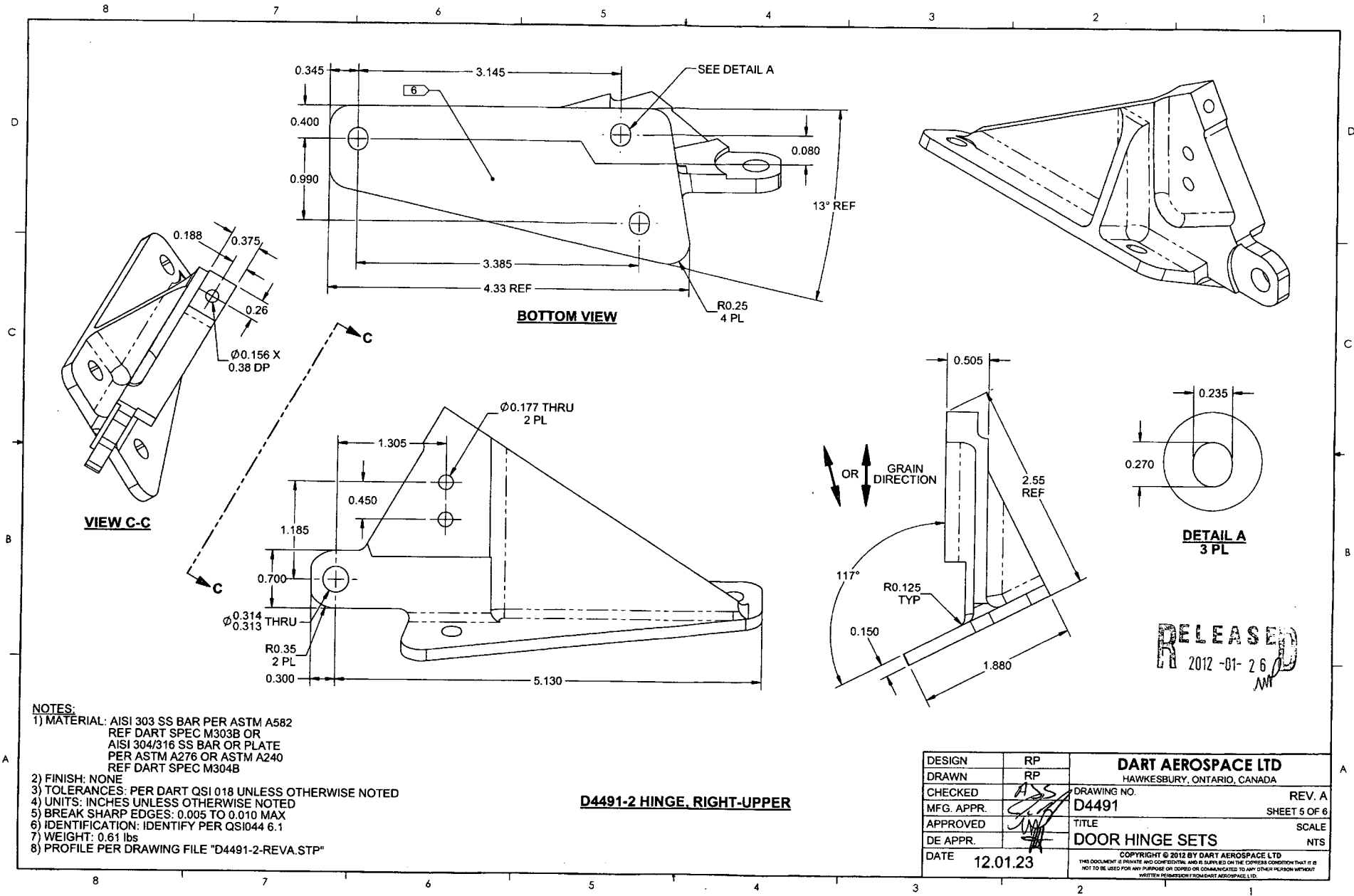
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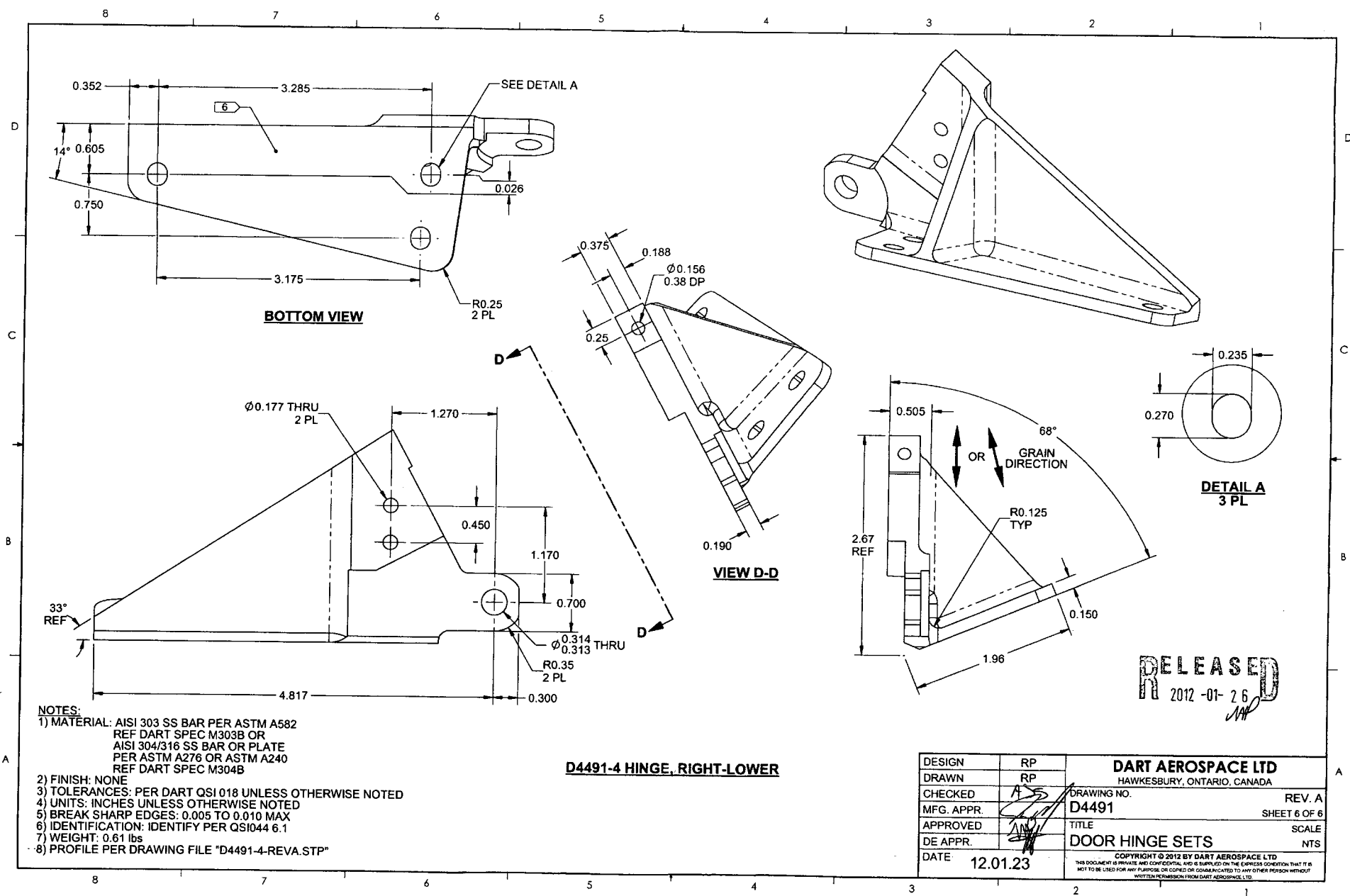
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



1393 Major Road
Orleans, ON
K1E 1H3

Phone # 613-899-2405

Packing Slip

Date	Invoice #
3/26/2012	89

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
16016	3/26/2012	FedEx	Archer	

Qty	Item Code	Description
3	Sales	D4491-1
3	Sales	D4491-2
1	Sales	D4491-3
2	Sales	D4491-4
		HST (ON) on sales



1393 Major Road
Orleans, Ontario
K1E 1H3


Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

Po Number	Part Number	Quantities
16016	D4491-1	3
	D4491-2	3
	D4491-3	1
	D4491-4	2

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 16016 issued by Dart Aerospace Inc.



Alex Mazerolle
President
Archer Precision Inc.
1393 Major Road,
Orleans Ontario
K1E 1H3

Jean-Luc Menard

From: Alex Mazerolle <Alex@archerprecision.ca>
Sent: Wednesday, April 25, 2012 8:30 AM
To: Jean-Luc Menard
Subject: Re: D4491's scrap parts

Good morning Jean-Luc,

Two of the hinges had an end mill that pulled out of its holder. The last hinge was scraped because we lost the transmission on the machine and could not finish the part.

Alex Mazerolle
President
Archer Precision Inc.
Alex@archerprecision.ca
613-899-2405

----- Original Message -----

From: Jean-Luc Menard
To: Alex Mazerolle
Sent: Monday, April 23, 2012 2:03 PM
Subject: FW: D4491's scrap parts

From: Jean-Luc Menard [<mailto:jmenard@dartaero.com>]
Sent: Monday, April 02, 2012 10:28 AM
To: Alex Mazerolle
Cc: Eric Downing (edowning@dartaero.com)
Subject: D4491's scrap parts

Hi Alex,

Could you send me a quick e-mail with what happened to the scrap hinges pls.
QC is asking so we can attach the e-mail for their records.

THX

JL

Jean-Luc Menard
Production Engineering Coordinator



DART AEROSPACE
1270 Aberdeen Street
Hawkesbury Ontario
Canada K6A 1K7
Tel: (613) 632-5200 Ext 227
jmenard@dartaero.com



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